

- GB9:1; -
- I) SUPPLIER OF POT BEARINGS SHALL PROVIDE A SOLE PLATE AND BEARING PLATE OF SUFFICIENT SIZE TO LIMIT CONCRETE STRESSES TO THOSE SPECIFIED IN AASHTO SPECIFICATIONS. COST OF BEARING PLATES AND SOLE PLATES SHALL BE INCLUDED IN THE PRICE BID FOR POT BEARING.
- 2) THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE POT BEARINGS TO BE USED. NO BEARING ASSEMBLY SHALL BE FABRICATED UNTIL THE BEARING MANUFACTURER HAS SECURED APPROVAL ON THE ENGINEER.
- 3) SEE SECTION 581 OF THE GEORGIA DOT SPECIFICATIONS FOR POT REQUIREMENTS.
- 4) RUNNER BARS OR GUIDE KEYS SHALL BE ORIENTATED PARALLEL TO THE DIRECTION OF MOVEMENT ON GUIDED EXPANSION BEARINGS.
- 5) THE EPOXY ADHESIVE FOR USE IN MAKING THE GROUT FOR SETTING THE ANCHOR RODS SHALL CONFORM TO THE REQUIREMENTS OF TYPE I GROUT OF SECTION 886 OF THE GEORGIA DOT SPECIFICATIONS.
- 6) ANCHORS RODS SHALL BE ASTM A 709 GRADE 50 STEEL, SWEDGED, AND NON-THREADED. RODS SHALL BE FLUSH WITH TOP OF BEARING PLATE, WELDED TO BEARING PLATE, AND GROUND FLUSH. COST OF ANCHOR RODS SHALL BE INCLUDED IN THE PRICE BID FOR POT BEARINGS.
- 7) TOP OF SOLE PLATE SHALL BE PARALLEL TO BOTTOM FLANGE, SOLE PLATE SHALL BE BEVELED TO ACCOUNT FOR SLOPE ACROSS THE BEARING ASSEMBLY AND SHALL BE OF SUFFICIENT SIZE TO ENSURE THAT BEARING STIFFENERS ON THE GIRDER ARE LOCATED WITHIN THE LIMITS OF THE SOLE PLATE BY AT LEAST I".
- 8) IF PLATES WITH DIMENSIONS OTHER THAN THOSE SHOWN ARE USED THE CONTRACTOR SHALL MAKE ALL NECESSARY DIMENSION AND ELEVATION ADJUSTMENTS. ANCHOR ROD LAYOUT ON BENT SHEETS IS BASED ON THE DIMENSIONS LISTED IN THE TABLE BELOW.
- 9) POT BEARINGS SHALL BE DESIGNED IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS AND THE LATEST AASHTO SPECIFICATIONS USING THE DESIGN DATA GIVEN BELOW. HORIZONTAL FORCES LISTED ARE IN ADDITION TO THOSE FORCES PRODUCED BY DEAD LOAD FRICTION.
- 10) ELASTOMERIC MATERIAL USED AS THE CONFINED MEDIUM WITHIN THE POT SHALL BE 100 PERCENT VIRGIN NEOPRENE (CHLOROPHRENE) MEETING THE REQUIREMENTS OF SECTION 885 OF THE GEORGIA DOT SPECIFICATIONS. THE ELASTOMER SHALL BE A MINIMUM GRADE 2 AND SHALL HAVE A DUROMETER HARDNESS OF 50 ± 5.

POT BEARING	G DESIG	SN DAT	Α			
ALL LOADS IN KIPS	BENT					
ALL LUADS IN KIPS	l	2	3	4		
TRANSVERSE HORIZONTAL FORCE	Х	Χ	X	X		
LONGITUDINAL HORIZONTAL FORCE	Х	X	X	X		
TRANSVERSE EARTHQUAKE FORCE	Х	X	X	X		
LONGITUDINAL EARTHQUAKE FORCE	Х	X	X	X		
TOTAL REACTION LOAD	X	X	X	X		
DEAD LOAD	X	X	X	X		
LIVE LOAD + IMPACT	X	X	X	X		
CONTRACTION CAPACITY **	X	X	X	X		
EXPANSION CAPACITY **	X	Χ	X	X		
T (MIN.)	X	X	X	X		
"X" AT & BEARING	Х	Χ	X	X		
BEARING PLATE L (MIN.)	Х	X	X	X		
BEARING PLATE W (MIN.)	Х	X	X	X		

\*\* AT 60° F

						. 00	•							
						BRIDGE NO. I								
	DATE	×	×	×	×			GEORGIA  ARTMENT OF TRANSPORTATION ERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES						
			POT BEARING DETAILS											
	VISIONS								X					
	REVIS	*		×   7	× ×	X						X		
DRAWING NO. 35-0001						NO	SCALE					Х		
BRIDGE SHEET X OF X	ВҮ	×	×	×	××	DESIGNED_			CHECKED X  DESIGN GROUP	X	REVIEWEDAPPROVED_	DLC/WMD BFR		
INCH WHE	N PR	INIT	FD	FI		SI7F						potbrng.dgn		

I INCH WHEN PRINTED FULL SIZE

DRAWING I

REVISED MAY 2, 2014

BASE POT-

BEARING PE-

- RUNNER BAR — SOLE 凡 \_\_ P.T.F.E. SEAL-\_\_\_\_\_\_ STAINLESS STEEL P. \_STAINLESS STEEL P.T.F. E. — PISTON —

**EXPANSION** CAPACITY-CONTRACTION CAPACITY — TOTAL MOVEMENT AND DIRECTION — € GIRDER — BASE POT-—ELASTOMERIC DISC  $\stackrel{\longleftarrow}{}$  TOP OF BENT SOLE R-└─ 1/8" NEOPRENE PAD -STEEL BEARING PLATE TOP R-(ASTM A 709 GRADE 50)

ا المراز DIAMETER ANCHOR ROD

GUIDED EXPANSION POT BEARING

BEARING PLATE -

 $-1\frac{1}{2}$ " DIAMETER ANCHOR ROD

FIXED POT BEARING

← Ç BASE POT = Ç BEARING P = Ç BEARING =

1111 111 11 1 1

← Q BASE POT = Q BEARING PL = Q BEARING =

Q TOP P2 = Q SOLE P2

<u>PLAN</u>

2<sup>1</sup>/<sub>4</sub>"
TYP.

Q TOP P = Q SOLE P

PLAN

TOP P\_\_\_

 $\mathbb{Q}$  GIRDER $\stackrel{\sim}{--}$ 

BASE POT-

BEARING P -

SOLE PE-

© GIRDER →

WITH 4 HOLES FOR ANCHOR |<del>< | |< 2</del>|/<sub>4</sub>" MIN. RODS. COUNTERSINK HOLES 3/8" FOR WELDING © 11/2"Ø ANCHOR ROD-(\*\*) DO NOT WELD UNTIL ALL OF THE FOLLOWING HAVE BEEN COMPLETED: ALL GIRDER SPLICES HAVE BEEN COMPLETED.

ALL CROSS FRAMES HAVE BEEN BOLTED INTO PLACE. FINAL POSITIONING OF THE GIRDER HAS BEEN ACCOMPLISHED. POT BEARING HAS BEEN ADJUSTED FOR THE TEMPERATURE EFFECTS SUCH THAT THE & BEARING WILL ALIGN WITH & GIRDER AND BEARING STIFFENERS AT 60° F.

\* FORM 3" DIAMETER HOLES FOR ANCHOR RODS AND GROUT

★ ELASTOMER SHALL BE LUBRICATED

ON ALL SIDES WITH A MEDIUM CONSISTENCY SILICONE GREASE.

SECTION A-A

© GIRDER → SOLE R-BASE POT CYLINDER ONE PIECE

-ELASTOMERIC DISC ∠ TOP OF BENT BRASS O-RING SEAL-└─ 1/8" NEOPRENE PAD - STEEL BEARING PLATE (ASTM A 709 GRADE 50) WITH 4 HOLES FOR ANCHOR ——2<sup>1</sup>/<sub>4</sub>" MIN.

RODS. COUNTERSINK HOLES 3/8" FOR WELDING

\* @ 11/2" DIAMETER ANCHOR ROD —

SECTION B-B

BRIDGE SHE X OF X